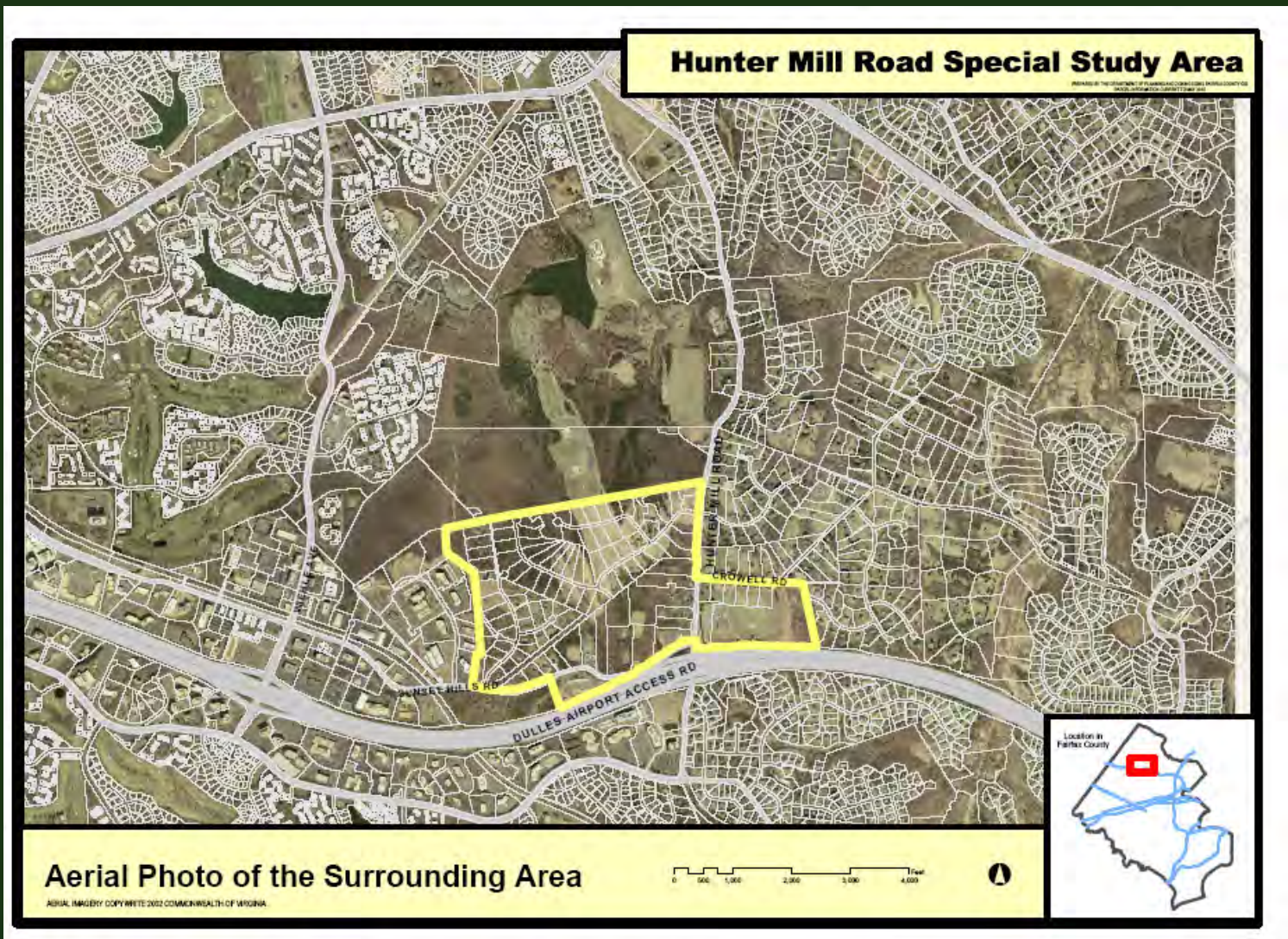

Hunter Mill Road Area Special Study: Existing Features

October 1, 2005

Presentation Outline

- **Surrounding Area**
- **Study Area Context**
- **Subject Area**
 - Institutional
 - Public Uses
 - Private Recreation
 - Residential
 - Undeveloped Land
- **Fairfax County Comprehensive Plan**
 - Land Use
 - Transportation
 - Heritage Resources
 - Public Facilities Watershed
- **Reston – Herndon Suburban Center Plan for Wiehle Avenue Area**
- **Alternative Development Summary**
- **Trends**

Study Area



Surrounding Context



Surrounding Context



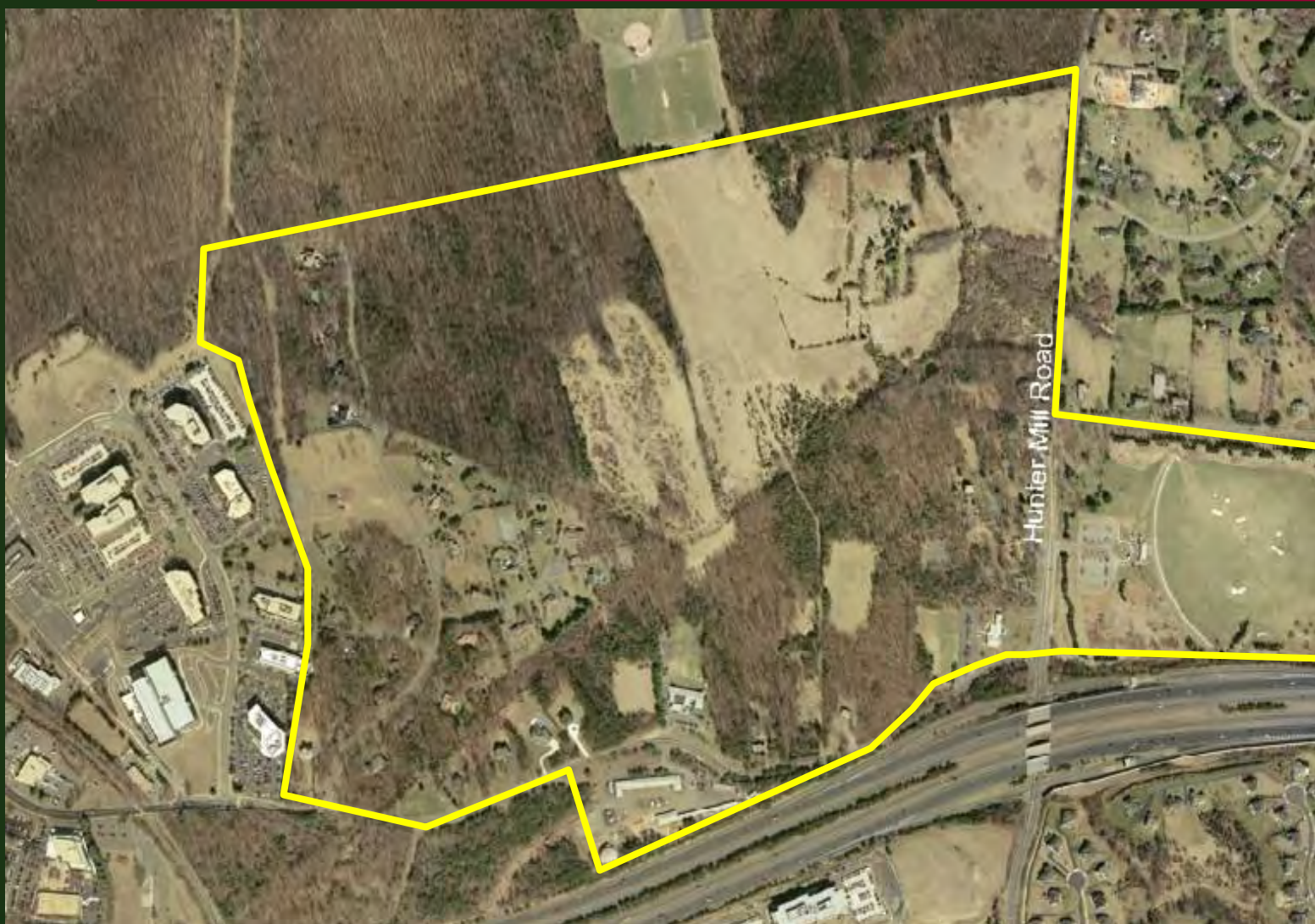
Surrounding Context



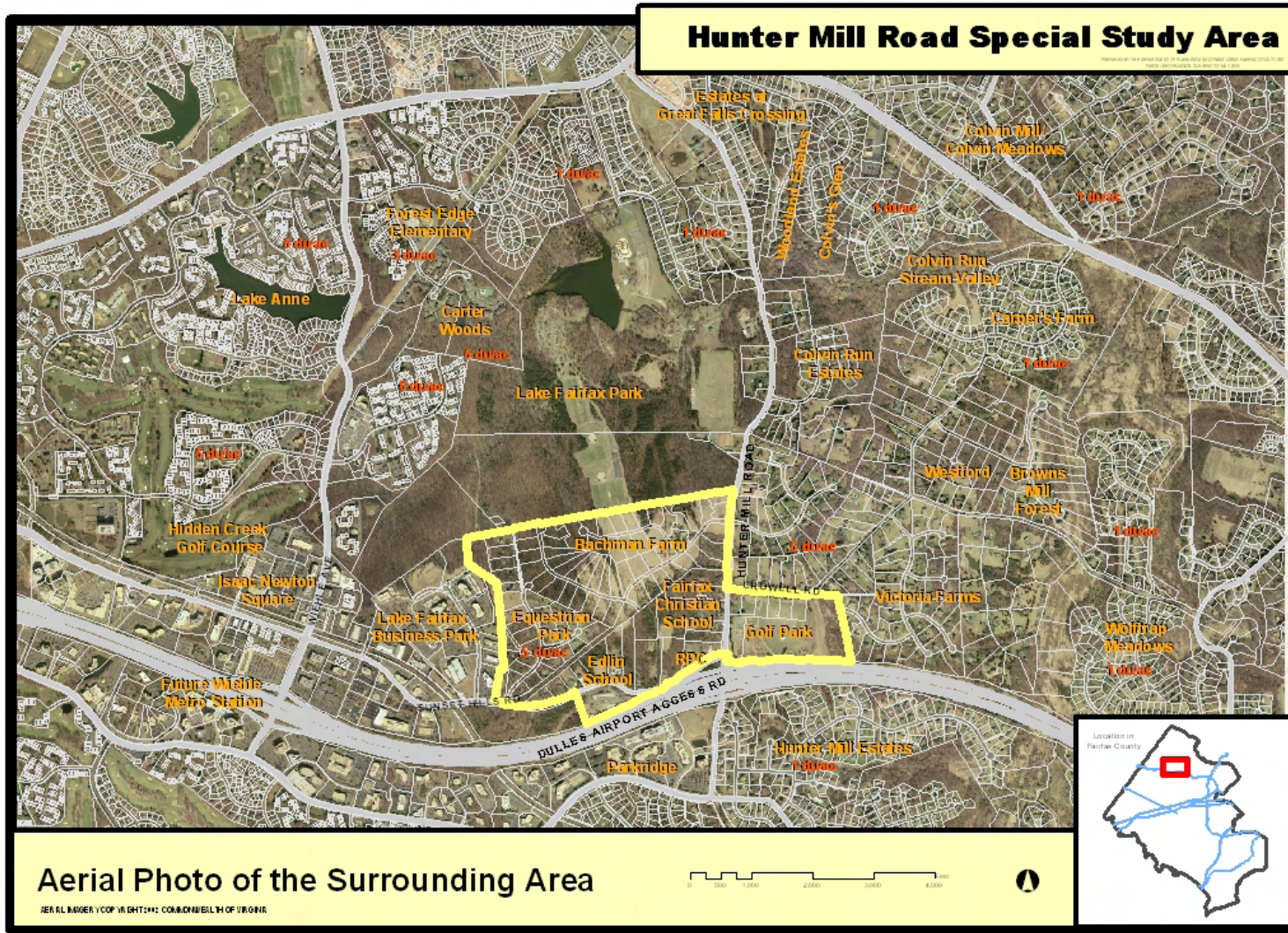
Surrounding Context



Surrounding Context



Surrounding Context



Surrounding Context

North:

West of Hunter Mill Road: Lake Fairfax Park – planned for public park and zoned R-E. Neighborhoods of single family detached houses planned for residential use at .2 -.5 dwelling units per acre (du/ac) and zoned R-E.

West:

Lake Fairfax Business Park – A mix of office, research and development, and industrial flex uses zoned I-3 and I-4.

East:

East of Golf Park – Victoria Farms area: single family detached houses planned for residential use at .2 -.5 du/ac and zoned R-E.

South (South of the Dulles Toll Road):

West of Hunter Mill Road – Reston Gateway at Parkridge: an office development zoned I-3 and planned for office use up to .35 FAR.
East of Hunter Mill Road – Hunter Mill Estates: a residential subdivision of 1 acre lots zoned R-1 and planned for residential use at .5-1 du/ac.

Subject Area

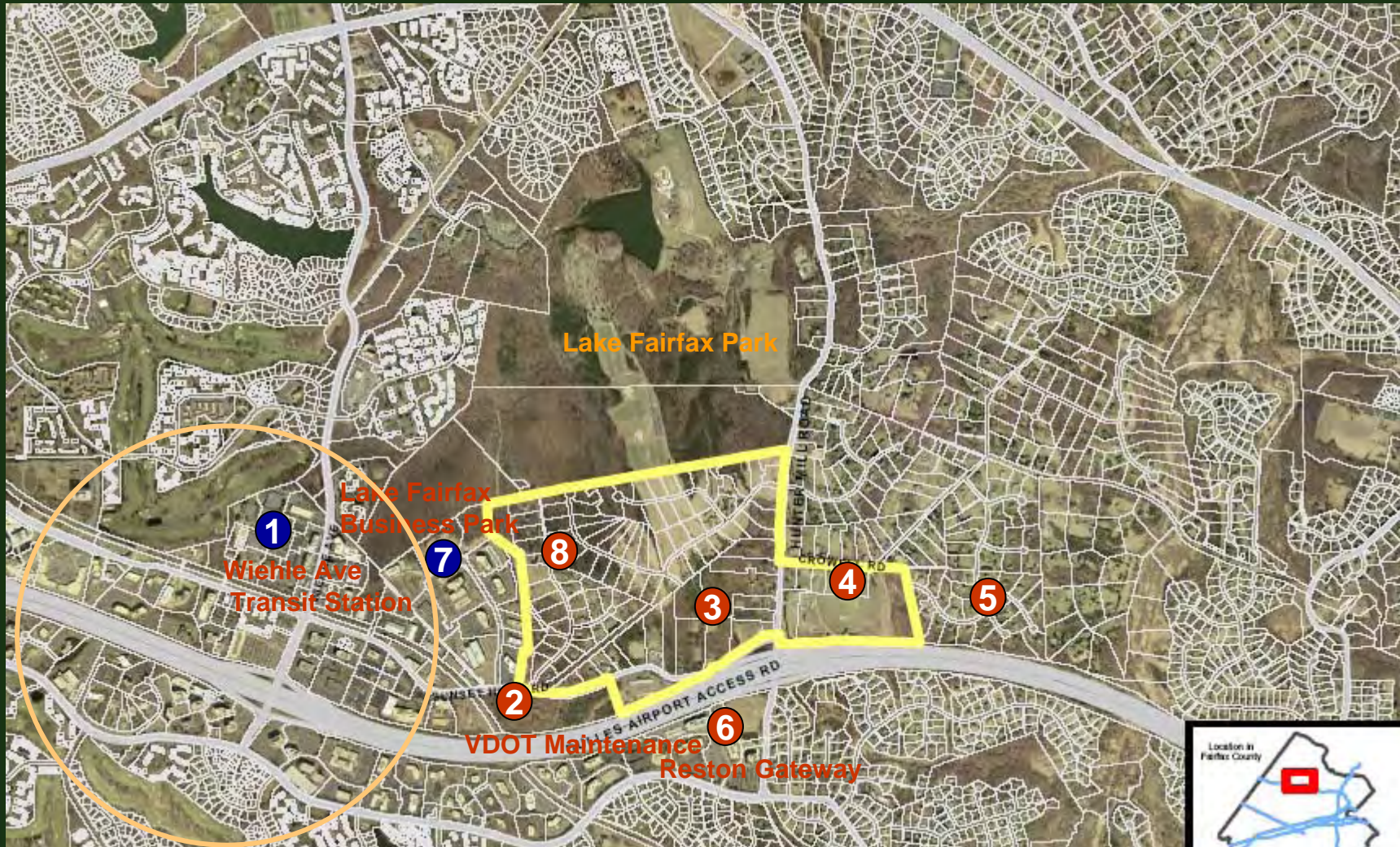
Hunter Mill Road Special Study Area consists of Approximately 309 acres.

- **Residential** – 75.8 acres – Thirty seven houses are developed on lots ranging from 1.2 to 8 acres, with an average lot size of approximately 2 acres. Most are in the Equestrian Estates subdivision
 - Bachman Farm, is a 116-acre site that is undeveloped but approved and subdivided for 52 single family detached houses.
- **Institutional** – 31.8 acres – Two private schools, Fairfax Christian School, the Edlin School, and Reston Presbyterian Church approved.

Subject Area

- **Public Uses** – 13.4 acres – A Virginia Department of Transportation Maintenance Yard located south of Sunset Hills Road.
- **Private Recreation** – 48 acres - The Golf Park at Hunter Mill is located east of Hunter Mill Road.
- **Vacant** – 136 acres – Approximately 44 percent of the area is currently undeveloped or vacant.

Study Area



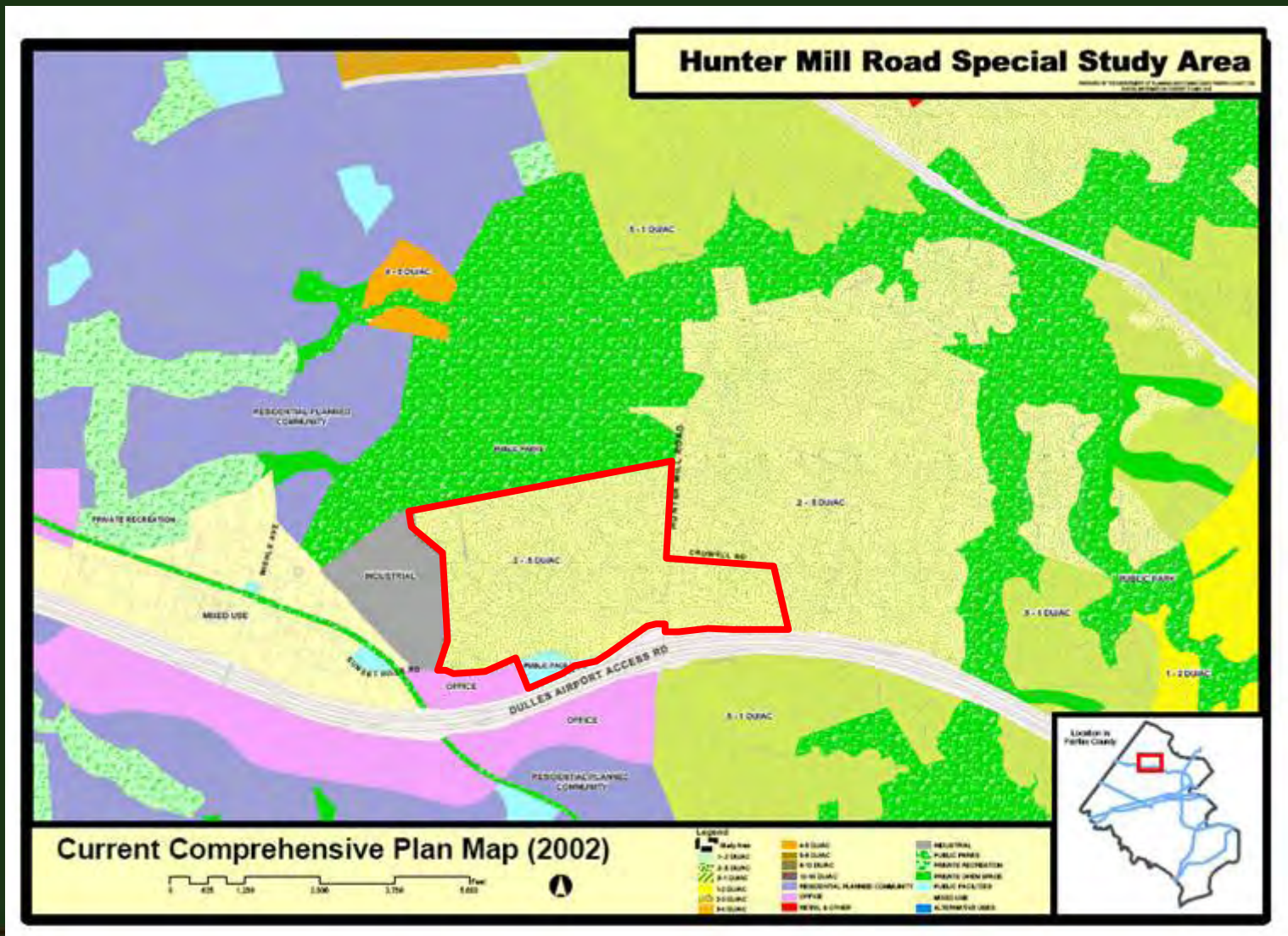
Subject Area

- **Wiehle Avenue Transit Station** – Wiehle TSA Planned Development w/rail 2.0 FAR adjacent to station and 1.0 FAR within ½ mile
- **VDOT Maintenance Yard** – Planned for Public Facilities
- **Edlin School** and **Fairfax Christian School** – Special Exceptions
- **Golf Park** – 48 acres – Zoned R- E - Planned for .2 - .5 du/ac
- **Crowell Road** – Lot sizes along Crowell Road approximately 2 acres. And planned for .2 - .5 du/ac
- **Hunter Mill Road (HMR) Heritage Resources** – The Virginia Department of Historic Resources determined the Hunter Mill Road corridor eligible for listing in the Virginia Landmarks Register and the National Register of Historic Places in 2001.

Subject Area

- **HMR Heritage resources (cont)** – HMR was designated a Virginia Byway in 2002.
- **Lake Fairfax Park** – 476 acres – 18-acre lake, outdoor swimming pool, fishing, boat rentals, carousel, trails, playground, open play area, and campground.
- **Reston Gateway at Park Ridge** – An office development zoned I-3 and planned for office use up to .35 FAR. East of Hunter Mill Estates: a residential subdivision of ½ and 1 acre lots zoned R-1 and planned for residential use at .5-1 du/ac.
- **Equestrian Park** – Lot sizes approximately 1.2-2.3 acres.
- **Lake Fairfax Business Park** – A mix of office, research, and development, and industrial flex uses zoned I-3 and I-4

Current Comprehensive Plan



Fairfax County
VIRGINIA

Hunter Mill Special Study Area

Existing Conditions

Comprehensive Plan

- **Land Use** - The Concept for Future Development designates this area as a Low Density Residential Area, with residential use at .1-.5 du/ac or as specified in the Area Plans. In general, non-residential uses are not encouraged, but in some instances may be appropriate at 0.05 – 0.1 FAR.
- **Transportation** – Adjacent to the study area, Hunter Mill Road, Sunset Hills Road, and Crowell Road are two-lane roads. Sunset Hills Road is planned as a four-lane road. Hunter Mill Road is planned as a two-lane road north of the Dulles Toll Road and as a four-lane road for a short segment in the vicinity of the Dulles Toll Road.

Existing Conditions

Public Facilities

- **Schools** – Study area is served by Wolftrap Elementary, Thoreau Middle School, and Madison High School. Wolftrap Elementary – 597 enrolled, capacity of 537. Thoreau Middle School – 728 enrolled, capacity of 725. Madison High School – 1883 enrolled, capacity of 1875.
- **Parks** - Hunter Mill Road study area is located adjacent to Lake Fairfax Park and in proximity to Colvin Run Stream Valley Park. Designated a Countywide Park, provides access to unique recreational facilities.
- **Trails** – Countywide Trails Plan Map indicates several planned trails in the study area.

Existing Conditions

Environment

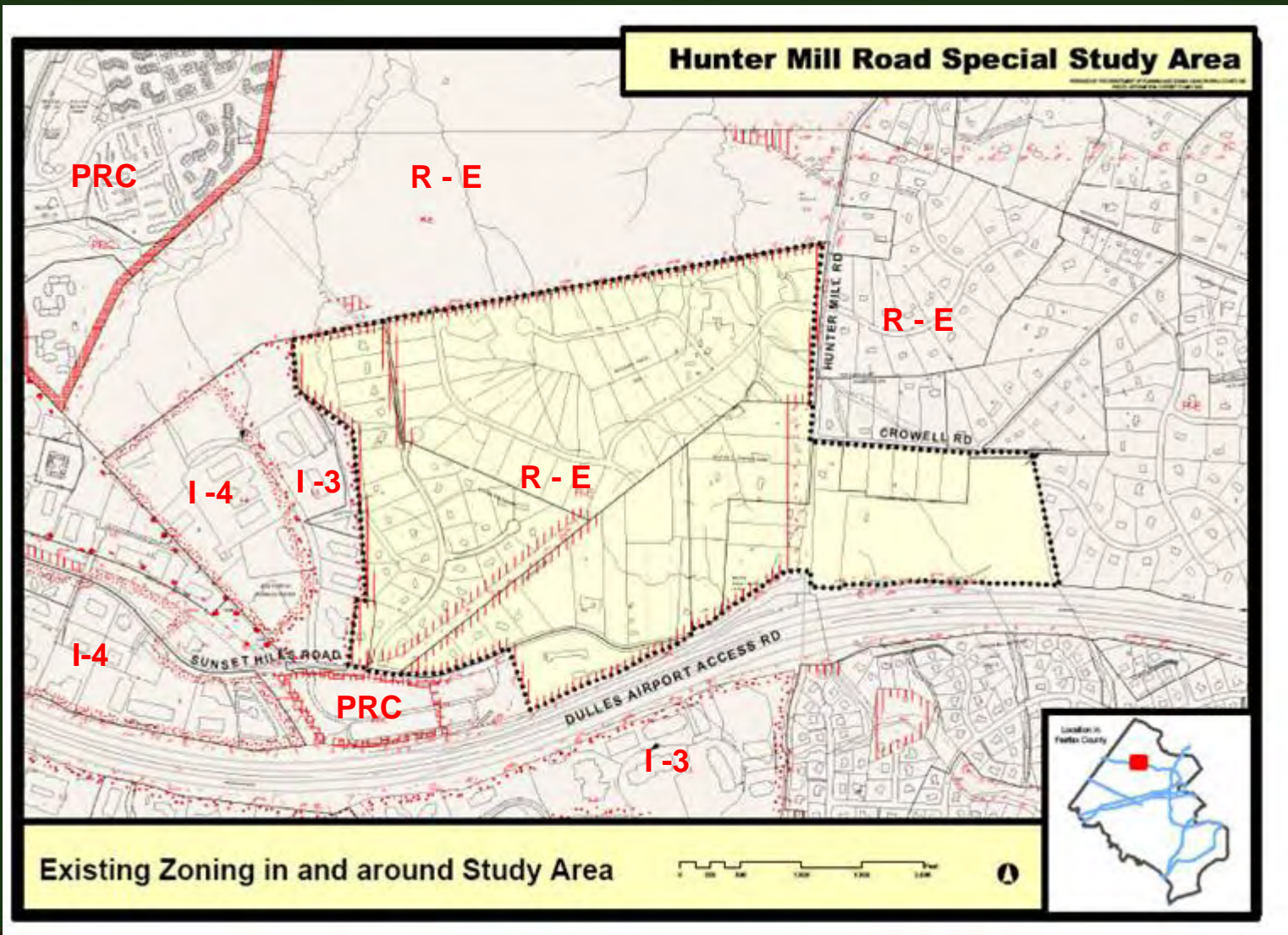
- **Watershed:** Study area is within the Difficult Run watershed. A Resource Protection Area/Environmental Quality Corridor (RPA/EQC) traverses in a north/south direction on the northwestern corner of the study area and a more extensive RPA/EQC traverses an aspect of the northeastern portion of the site west of Hunter Mill Road. The RPA/EQC should be protected and development should not occur within these environmentally sensitive areas.
- **Hydric Soils:** The Fairfax County Soil Survey demonstrates some areas of hydric soil throughout the subject property. Hydric soil is one parameter which is evaluated when delineating jurisdictional wetlands. Any land disturbance in jurisdictional wetland areas will require appropriate permitting under the Clean Water Act.

Existing Conditions

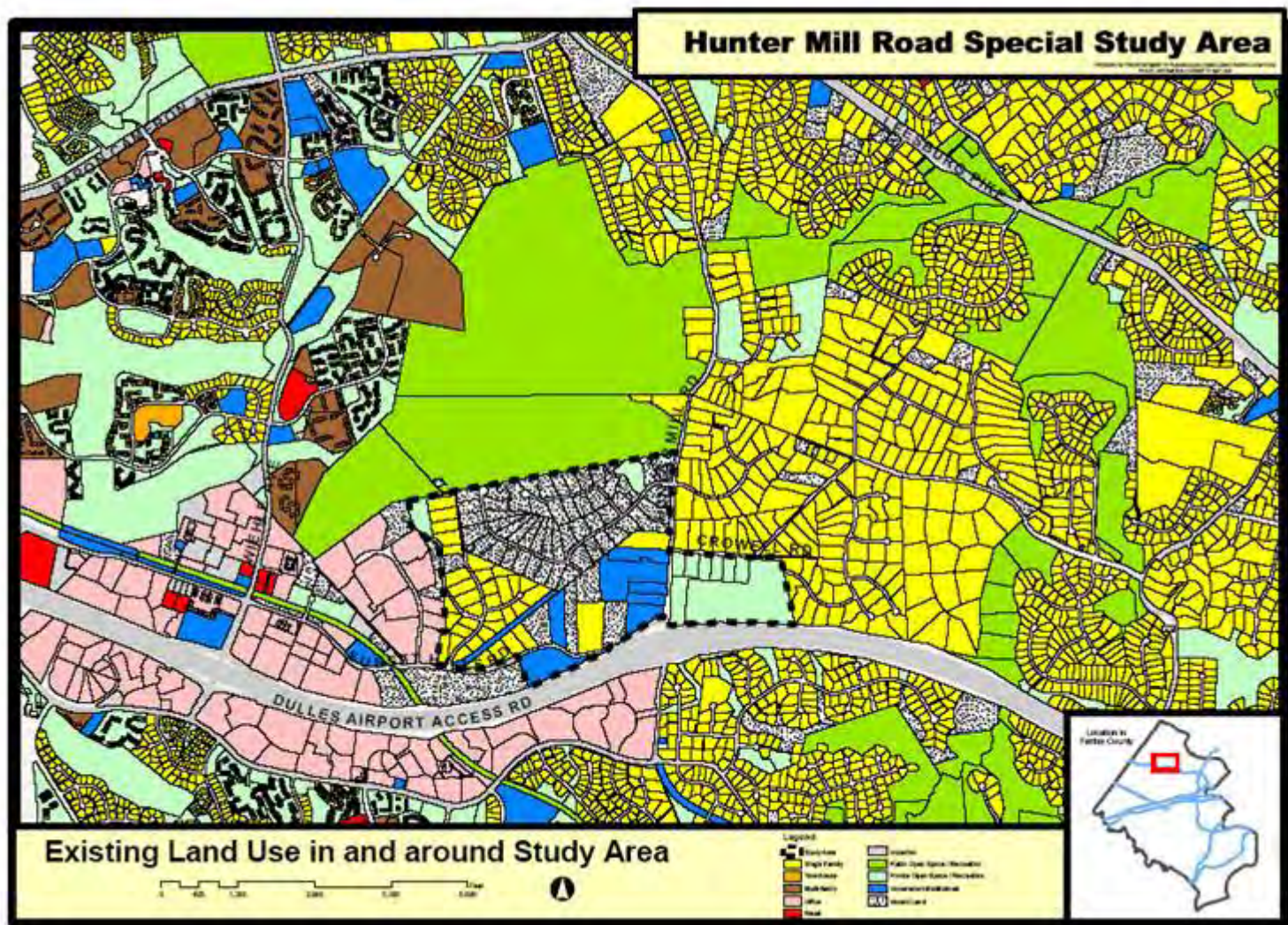
Environment Cont'd

- **Asbestos:** The Hunter Mill Road Special Study Area contains a swath of Orange Soil with naturally occurring asbestos which traverses in a north and south direction through the study area west of Hunter Mill Road, specifically in the location of the Bachman Property. The Fairfax County Health Department has developed directives that outline the standard operating procedure recommended by the Occupational Safety and Health Administration (OSHA) for protection of construction workers as well as general site containment in areas where naturally occurring asbestos is present.
- **Highway Noise:** Any residential proposed adjacent to the Dulles Road will require mitigation – interior and exterior noise. Zoning Ordinance – 200' setback requirement from the right-of-way.

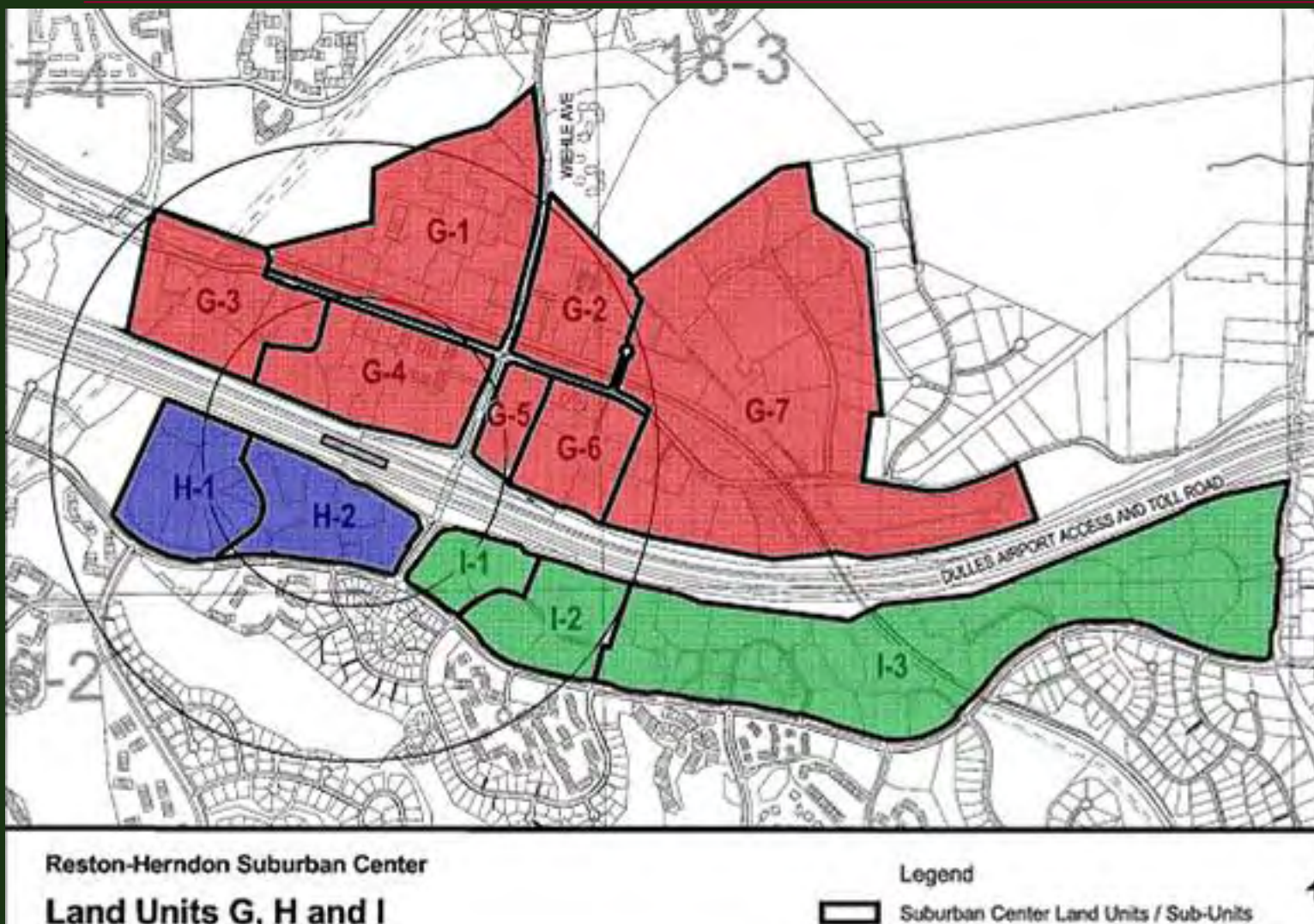
Existing Zoning



Existing Land Use



Wiehle Transit Station Area Center



Alternative Development Scenarios

- Three concepts were devised to estimate possible impacts on systems such as schools, roads and parks.
- The analyses are intended to provide a general understanding of the development scenarios. The concepts do NOT reflect a specific proposal or support of a proposal.
- The concepts represent a low, medium and high range.
- Low = .5 dwelling units per acre
- Medium = 2 dwelling units per acre and office use
- High = 8 dwelling units per acre with limited office and retail uses

Alternative Development Scenarios

Subject Area	Alternative 1	Alternative 2	Alternative 3
309 acres	Res. use @ .5 du/ac	Res. use at 2 du/ac & office	Res. use @ 8 du/ac, office & retail
Residential	154 SFD	550 SFD, TH	2,400 SFD, TH, MF
Office	0	222,156 sq. ft	19,000 sq. ft.
Retail	0	0	28,000 sq. ft.

SFD = Single Family Detached

TH = Townhouse

MF = Multifamily

Alternative Development Scenario Impacts

Transportation

Current and Projected Average Daily Trips

- Average Daily Traffic (ADT) on Hunter Mill Road (year 2000):
Sunrise Valley Drive to Dulles Toll Road = 21,100 vpd
DTR to Crowell = 15,000 vpd (year 2004)
North of Crowell = 8,300 vpd
- Sunset Hills Road from Wiehle Ave to Hunter Mill = 9000 vpd
- Crowell Road from Hunter Mill to Beulah Road = 8200 vpd
- Estimated (ADT) in 2025:
Hunter Mill – SVD to DTR = 31,100
Hunter Mill – DTR to Crowell (not available)
Hunter Mill N of Crowell = 15,600
- SSH – Wiehle Ave to Hunter Mill Road = 12,700
- Crowell – Hunter Mill Road to Beulah Road = 11,800
- Hunter Mill is a minor arterial, for LOS “D”, capacity is 15,600 for 2 lanes.

Alternative Development Scenario Impacts

Transportation Con't

Trip Generation Estimates

	<u>Daily</u>	<u>AM</u> <u>Peak In</u>	<u>AM Peak</u> <u>Out</u>	<u>PM Peak</u> <u>In</u>	<u>PM Peak Out</u>
Alternative 1	1,474	29	87	98	58
Alternative 2	7,710	406	350	406	481
Alternative 3	21,538	369	1,126	1,232	743

Alternative Development Scenario Impacts

Transportation Con't Observations

- A Traffic Impact Study to quantify impacts and determine the transportation improvements is required at rezoning.
- The Dulles Toll Road/Hunter Mill Road Interchange and the Hunter Mill Road/Sunset Hills Road Intersection function poorly today and require improvements in the future independent of the alternatives under consideration.
- Multiple points of access are assumed for all Alternatives:
 - Alternative 1 would likely require modest access improvements.
 - Alternative 2 would likely require improvements such as realignment and widening of Sunset Hills Road and frontage improvements on Hunter Mill Road. Hunter Mill Road between the Dulles Toll Road and realigned Sunset Hills would likely be improved to four lanes.
 - Alternative 3 would likely require realignment and widening of Sunset Hills Road, frontage improvements on Hunter Mill Road, and consideration of a grid network of streets with a new road paralleling Sunset Hills Road connecting to Wiehle Avenue.

Alternative Development Scenario Impacts

Schools

Elementary:

- Alternative 1 could be accommodated with temporary classrooms.
- Alternatives 2 and 3 would require capital improvements such as an addition (alternative 2) or possibly a new school (alternative 3).

Middle and High School:

The middle and high school facilities should be able to accommodate students from any of the three alternatives, although Alternative 3 may require a modular addition or temporary classrooms at the middle school level.

Alternative	Du's	Elemen	Middle	High	Total Students
1	154	38	11	24	73
2	550	134	39	87	260
3	2400	491	129	277	897

Alternative Development Scenario Impacts

Parks

Facility Type	Service Level Standards	Park Impacts			
		Scenario 1 pop: 496	Scenario 2 1771	Scenario 3 6555	Current Deficit
Local Parkland	5 acres/1000	2.48 acres	8.85 acres	32.77 acres	(385)
District and Countywide Parkland	13 acres/1000	6.44 acres	23.02 acres	85.21 acres	(351)
Rectangle Fields	1 field/2,700	0	1	2	(10)
Adult Baseball	1 field/24,000	0	0	0	(4)
Adult Softball	1 field/22,000	0	0	0	(1)
Youth Baseball	1 field/7,200	0	0	1	(9)
Youth Softball	1 field/8,800	0	0	1	(3)
Basketball Courts	1 court/2,100	0	1	3	(36)
Playgrounds	1 apparatus/2,800	0	1	2	(21)

Alternative Development Scenario Impacts

Parks Con't

- Service Level Standards are based on population
- Current deficit based on 2-mile radius
- There exists a significant deficiency for all facilities in this area
- Scenario 1 will not create its own deficiencies but will exacerbate existing deficiencies

Alternative Development Scenario Impacts

Sewer

- The Wastewater Planning and Monitoring Division of the Department of Public Works and Environmental Services indicates there are no sewer *treatment* capacity issues or sewer line capacity issues for the 3 scenarios
- The standard solution to sewer *line* capacity limitations is that developers are advised to increase the capacity by enlarging the lines or running new lines.

The Big Picture: Trends 2000 - 2030

Jobs and Households

- Jobs in the region will increase by 50 percent, a higher rate than households
- Job growth in No. Va. will be slightly higher than DC and Maryland, with Fairfax County among the highest in No. Va. jurisdictions. Outer suburbs will experience the greatest percentage increase
- Households in the region will increase by about 40 percent, with more than half of those going to Fairfax, Loudoun, Montgomery and Prince George's Counties.

The Big Picture: Trends 2000 - 2030

The Region

- The suggested optimum balance of jobs to housing is 1.5 jobs per dwelling
- Activity Center* jobs/housing balance: 8.4 jobs per dwelling
- When expanded to include areas adjacent to the centers: 3.8 jobs per dwelling

* Metro DC Activity Center examples: Tysons, Dulles and Rt. 28 Corridors, Merrifield. In Fairfax County Centers correspond to classifications in the Comprehensive Plan Concept for Future Development

The Big Picture: Trends 2000 - 2030

What Does This Mean?

- The Comprehensive Plan provides additional residential development potential if rail and other assumptions regarding mixed use are realized. For example, the Wiehle TSA is planned for almost 6,000 dwellings. However, restrictive covenants could limit housing to less than 1,000 units. Even if these are implemented, there may still be a need for more residential units in Fairfax County from a jobs/housing perspective.
- If these assumptions are not realized, work commutes may increase and housing may become more expensive in activity centers. Some potential impacts include traffic congestion, diminished ability for workers to live near jobs, and difficulty in finding workers to fill entry level or lower paying jobs.
- Possible solutions include promoting housing in activity centers in the region, as well as encouraging transit use, telecommuting or home offices.

Surrounding Context



Surrounding Context

